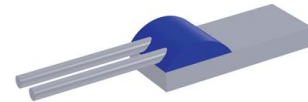


Chip platinum resistance temperature sensor is a kind of temperature resistance, The process and the permissible tolerances are defined according to the international standard EN60751. They combine the characteristics of platinum resistance temperature sensor.

Their characteristic is standardization and good compatibility, high measurement precision, long-term stability and repeatability.

Using the temperature range is designed for - 200...+ 650 degrees Celsius



Typical Applications

- Automotive
- White goods
- HVAC
- Food processing industry
- Medical industry

Features

- Excellent long-term stability
- Fast response time
- Low self-heating
- Metalized backside available
- Long isolated wires
- Customer specific sensor available upon request

Technical Data

Item	Parameter	
Temperature range	-200~750°C	
Normal Resistance	100 Ω @ 0 °C / 1000Ω @ 0 °C	
Characteristics curve(TCR)	3850ppm/K	
Tolerance class	DIN EN 60751 F0.15 A	DIN EN 60751 F0.3 B
(dependent on temperature range)	DIN EN 60751 F0.6 C	DIN EN 60751 F0.1 Y
Recommended applied current ⁽¹⁾	1 mA at 100 Ω / 0.5mA at 500 Ω / 0.5mA at 1000 Ω	
Long-term stability	< 0.04 % at 1000 h at maximal operating temperature	
Respond time	Water @ 0.4m/s	T _{0.5} =0.05S, T _{0.9} =0.15S
	Air @ 2m/s	T _{0.5} =3.0S, T _{0.9} =10.0S
Power dissipation	0.4K/mW	

Note:

Self-heating must be considered.

Ordering code

PT 100 A 5038 1 xxxx x - XXX
 (1) (2) (3) (4) (5) (6) (7) (8)

- (1) Platinum sensor with wires
- (2) Resistance value at 0°C, unit: Ω
- (3) Tolerance class

Code	Description
A	DIN EN 60751 F0.15
B	DIN EN 60751 F0.3
C	DIN EN 60751 F0.6
Y	DIN EN 60751 F0.1
K	customer specific

- (4) Size code
See Dimensions.

- (5) Operating temperature range

Code	Description
A	-50 °C to +150 °C
B	-50 °C to +500 °C
C	-200 °C to +300 °C
D	-200 °C to +400 °C
E	-200 °C to +600 °C
F	-200 °C to +750 °C

- (6) Connections

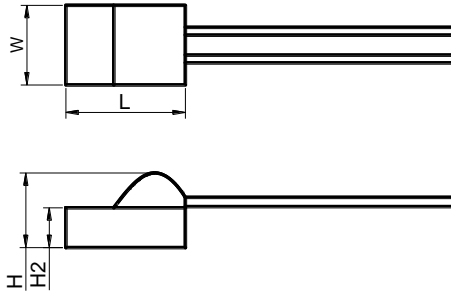
Code	Description
SL	SIL
LW	insulated wire
LD	insulate stranded wire
EC	enameled Cu wire
FW	flat wire
CS	customer specific

- (7) Special

Code	Description
T	substrate thickness 0.25 mm
D	substrate thickness 0.38 mm
R	round housing
W	sintered powder
M	metallized backside
U	inverted welding
S	special

- (8) Wire length, unit: mm.

Dimensions (mm)



Code	Size			
	L	W	H	H2
1612	1.6	1.2	0.4	0.8
2320	2.3	2.0	0.65	1.3
5016	5.0	1.6	0.65	1.3
5020	5.0	2.0	0.65	1.3
5038	5.0	3.8	0.65	1.3
1020	10.0	2.0	0.65	1.3